B20

PROFESSIONAL SERIES

2420 8 Ω

8″. 20cm

Bass Midrange Driver
High Sensitivity
High Sounding Quality

APPLICATIONS

Bass midrange transducer dedicated to the reproduction of 70-3000Hz frequencies.
The medium power handling capacity version of the 2400.
Its design gives priority to bass extension.

FEATURES

Power handling capacity	**200 W AES**
Reference efficiency (1W @ 1m)	**94 dB SPL**
SPL max (continuous)	**113 dB SPL**
Usable frequency range	**70-3000 Hz**
Environmental withstanding	**Outdoor**

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8″ ▪ 20 cm Bass Midrange Driver

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TYPICAL CHARACTERISTICS			
Rated impedance	Z	8	Ω
Reference efficiency (1 W@1 m)	-	94	dB SPL
Usable frequency range [1]	-	70-3000	Hz
Power handling capacity [2]	(AES)	200	W
Max Sound Pressure Level [3]	SPLmax	113	dB SPL
Min. impedance modulus	Zmin	5.6 @ 370Hz	Ω
Voice-coil inductance [4] @ 1 kHz	Le1k	0.85	mH
@ 10 kHz	Le10k	0.46	mH
Bl product	BL	12.9	N/A
Moving mass	Mms	0.025	Kg
THIELE-SMALL PARAMETERS : TYPICAL (QC LIMITS)			
Resonance frequency [5]	Fs	72(±10)	Hz
DC resistance [6]	Re	5.4 (±0.6)	Ω
Mechanical quality factor	Qms	4.5	1
Electrical quality factor	Qes	0.37	1
Total quality factor	Qts	0.34	1
Mechanical suspension compliance	Cms	200	10^{-6} m/N
Effective piston area	Sd	0.0219	m^2
Equivalent Cas air load	Vas	0.0130	m^3
Max. linear excursion	Xmax	±5.0	mm
Linear displacement volume	Vd	0.110	10^{-3} m^3
Half-space efficiency		1.3	%
Unity load volume	Vas Qts^2	1.5	10^{-3} m^3
ABSOLUTE MAXIMUM RATINGS			
Short term max. input voltage [7]	Vmax	80	V
Max. excursion before damage	Xdam	±10	mm
Ambient operating temperature		–10 to +50	°C
Storage temperature [8]		–20 to +70	°C
Environmental conditions [9]		Outdoor	
APPLICATION INFORMATION			
Air volume occupied by the driver [10]		0.720	10^{-3} m^3
Speaker net mass		3.020	Kg
Recommended reflex box	Vb/Fb	15 / 70	L / Hz
Electrical polarity	A positive voltage applied on the red terminal produces forward cone motion.		

SPECIFICATION NOTES

Note 1 : Allowing for energy response, excursion capability, Power spectrum, and -3dB low freq. roll-off for standard reflex tuning.

Note 2 : Established at 20°C ambient temp, according to AES2-1984 standard using IEC268-1 simulated programme signal and a 15 liter Bass-Reflex test enclosure tuned at 70Hz.

Note 3 : Established at 1m on axis of the loudspeaker mounted in test enclosure, when driven at full AES Power Handling Capacity, including 4dB of thermal compression loss.

Note 4 : Measured at 20 mA in free air.

Note 5 : Measured at 20 mA and 20°C ambient temp. in free air conditions, after full run and rest.

Note 6 : Measured at 20°C ambient temp. QC limits are ±10 %

Note 7 : Stated in RMS voltage according to IEC 268-5.

Note 8 : Includes shipping conditions. The lower limit prevents from demagnetization.

Note 9: Our products are classified in three categories : Indoor, Outdoor, and Outdoor✚ for permanent outdoor use or severe conditions.

Note 10 : Calculated for front mounting on to a 18 mm thick board.

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